

WHAT IS CLAIMED IS:

1. A game device for updating a game image every predetermined update cycle, comprising:

5 environment information production means for producing environment information which is a basis for the game image of the subsequent update cycle;

main game image production means for producing a main game image based on said environment information;

10 sub game image production means for producing a sub game image by a process to be finished within shorter times than times for producing said main game image;

sub game image display process control means for causing said environment information production means to repeatedly produce the environment information a plurality of times in a continuous manner within a predetermined period appearing every said update cycle, causing said sub game image production means to produce the sub game image based on the last produced environment information among the information produced the plurality of times, and performing  
15 a sub game image display process for displaying the sub game image as said game image;

main game image display process control means for causing said environment information production means to produce the environment information within the predetermined period appearing every said  
25 update cycle, causing, every time the environment information is produced, said main game image production means to produce the main game image based on the produced environment information, and

performing a main game image display process for displaying the main game image as said game image; and

control means for selectively causing either said sub game image display process control means or said main game image display process control means to perform the process based on a predetermined condition.

2. The game device according to claim 1, wherein said predetermined update cycle is a cycle of a vertical blanking period, and said predetermined period is the vertical blanking period.

3. The game device according to claim 2, further comprising supervisory means for supervising a remaining time of the vertical blanking period, wherein

when the sub game image display process is performed, said sub game image display process control means causes said environment information production means to repeatedly produce three-dimensional environment information in a continuous manner until the remaining time of said vertical blanking period supervised by said supervisory means reaches a predetermined time.

4. A game control method for causing a computer to run a game updating a game image every predetermined update cycle, wherein, in accordance with a game operation provided by a player of the game, said computer selectively performs one of the steps of producing environment information which is a basis for a game

image of the subsequent update cycle within a predetermined period appearing every said update cycle, producing, every time the environment information is produced, a main game image based on the produced environment information, and displaying the main game  
5 image as said game image, and

repeatedly producing the environment information which is a basis for the game image of the subsequent update cycle a plurality of times in a continuous manner within the predetermined period appearing every said update cycle, producing a sub game image based  
10 on the last produced environment information among the information produced the plurality of times, and displaying the sub game image as said game image.

5. A computer readable medium for storing a game control  
15 program to cause a computer to run a game updating a game image every predetermined update cycle, said game control program causing:

a first procedure of producing environment information which is a basis for a game image of the subsequent update cycle within a predetermined period appearing every said update cycle, producing,  
20 every time the environment information is produced, a main game image based on the produced environment information, and displaying the main game image as said game image,

a second procedure of repeatedly producing the environment information which is a basis for the game image of the subsequent  
25 update cycle a plurality of times in a continuous manner within the predetermined period appearing every said update cycle, producing a sub game image based on the last produced environment

information among the information produced the plurality of times,  
and displaying the sub game image as said game image, and

a control procedure of causing said computer to selectively  
perform one of said first and second procedures in accordance with  
5 a game operation provided by a player of the game.